

EXHIBIT A

**CAMP LEJEUNE: CONTAMINATION
AND COMPENSATION, LOOKING
BACK, MOVING FORWARD**

HEARING
BEFORE THE
SUBCOMMITTEE ON INVESTIGATIONS AND
OVERSIGHT
COMMITTEE ON SCIENCE AND
TECHNOLOGY
HOUSE OF REPRESENTATIVES
ONE HUNDRED ELEVENTH CONGRESS
SECOND SESSION
SEPTEMBER 16, 2010
Serial No. 111-108

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VOC/Organic solvent drinking water contamination was subsequently used to hide a more sinister contaminant, benzene.

Massive fuel leaks at the Hadnot Point Fuel Farm.

The Hadnot Point Fuel Farm (HPFF) was constructed on the Southeast corner of Holcomb Blvd and Ash Street sometime in 1941. The fuel farm was comprised of fourteen fuel tanks buried in the ground and one large 600,000 gallon tank located above ground. The fuel farm was located in what is now known as the Hadnot Point Industrial area and within 1,200 feet from potable water well HP-602 which was also constructed in 1941.⁴⁷ The first documented fuel leak at the HPFF occurred in 1979 when an estimated 20,000 to 30,000 gallons of fuel leaked from an underground valve.⁴⁸ A condition survey for the HPFF was scheduled the following year and other problems were found at the HPFF. The LantDiv engineer concluded that because of age, failure to clean the tanks, and lack of maintenance, there had been a general condition of corrosion and deterioration of the tanks and connecting pipelines. Many of the interconnecting valves and flanges could not be inspected because they were buried and/or could not be located. The engineer recommended replacing the connecting piping, the inspection of all of the tanks for leaks and repair existing leaks.⁴⁹ The Condition Survey was followed in 1981 with a Military Construction Data project number LE201M to repair the HPFF facilities and \$537,200 was then allocated to clean and repair the petroleum tanks.⁵⁰ By March of 1983, Navy and Marine Corps officials determined that piece meal rehabilitation of the HPFF was not cost effective and in 1985, the recommendation was made to replace the HPFF with a new facility.⁵¹ The fuel farm was finally replaced in 1990.

There are no known records indicating that the Marine Corps made any attempt to remediate the 20,000 to 30,000 gallon 1979 fuel leak between 1980 and 1988. In May 1988 correspondence, the Assistant Chief of Staff, Facilities finally notified the State of North Carolina that a 15 foot thick fuel plume was contaminating the groundwater underlying the bulk fuel facility.⁵² The base Staff Judge Advocate, Col. Tokarz, noted that the fuel farm was losing fuel into the groundwater at the rate of 1,500 gallons per month. The colonel also warned that delays will result in an indefensible waste of money and a continuing threat to human health and the environment.⁵³

Knowing the existence of a massive 20,000–30,000 gallon fuel leak in 1979 which drained into the ground at the Hadnot Point Industrial area with no attempts to remediate or recover the lost fuel until at least 1989, leads a rational, prudent person to speculate why it took the Marine Corps five years to sample the nearest potable water well (HP-602) to ensure the well was free of fuel contamination. After all, BUMED 6240.3B and version C carried an obligation for the Marine Corps to make sure potable water was obtained from the most desirable source feasible and efforts be made to prevent or control pollution of the source.⁵⁴ Where are the documents detailing these required efforts? Instead, the Marine Corps relies on their assertion that VOCs, including the SVOC benzene, were not regulated by the Safe Drinking Water Act until the late 1980's and early 1990's to avoid addressing the issue.⁵⁵ Does there have to be a set standard or maximum containment level for a polluter to be negligent in their duties to protect human health? Where does common sense enter into the equation? Prior to 1984, there are no known records indicating that the Marine Corps took any action to protect the water supply for well HP-602 from fuel contamination and consequently the entire Hadnot Point water distribution system.

One of the few potable water wells selected for sampling by the Navy's NACIP program was well HP-602. The 1982 draft copy of the IAS report stated that well HP-602 was designated for sampling in the Confirmation study because it was located 1,100 feet down-gradient from the HPFF and actively pumping.⁵⁶ The final IAS report released in April 1983 detailed the fuel losses for the HPFF totaled somewhere between 20,000 to 50,000 gallons of fuel. This figure became the basis for the fuel loss estimates for the public, Congress and more importantly, the Agen-

⁴⁷ Cercla 417, Pdf page 5, December 1988.

⁴⁸ CLW 709, Pdf page 133, April 1983.

⁴⁹ Cercla 96, Pdf pp 11–16, June 1980

⁵⁰ Cercla 96, Pdf page 17, March 1981.

⁵¹ Cercla 96, Pdf page 29, August 1989.

⁵² Cercla 96, Pdf page 30, August 1989.

⁵³ Cercla 96 Pdf page 34, March 1988

⁵⁴ CLW 144, Pdf page 3, August 1972.

⁵⁵ USMC CL Booklet, page 8, July 2010.

⁵⁶ Cercla 332, Pdf page 52, June 1982.

cy for Toxic Substances and Disease Registry (ATSDR), the agency tasked with studying the health effects resulting from the potential exposures at Camp Lejeune. This misconception remained until 2010 when it was discovered that the fuel losses at the HPFF amounted to much more than what was previously disclosed by the Navy and the Marine Corps. Once again a reference from the current Camp Lejeune informational brochure is appropriate. According to the Marine Corps:

“Question: Has the Marine Corps intentionally withheld information from ATSDR in order to delay their studies?”

Answer: No. The Marine Corps has made extraordinary efforts to provide ATSDR access to any potentially relevant information we control. We recognize that this issue deals with complex science, and we have been working with ATSDR to get our former residents the answers they deserve in a timely manner.

The Marine Corps does not benefit in any way from delays to ATSDR's work. The people who were exposed are our family members and fellow Marines. We are much as anyone, want to be able to give them accurate answers in a timely manner.”⁵⁷

In March of last year, the ATSDR stumbled across a previously undisclosed web portal belonging to the Navy. A sub contractor to ATSDR was inadvertently given access to this portal by a Marine Corps' librarian. Contained within the NavFacEngCom's Underground Storage Tank (UST) web portal were documents previously withheld from the ATSDR including details on the size and scope of the fuel loss from the Hadnot Point Fuel Farm underground storage tanks. According to documents discovered in the portal, the Marine Corps lost 1.1 million gallons of fuel at the HPFF over the course of the 49 year operational history of the facility. Much of this fuel was located within 300–1,100 feet away from well HP-602. The fuel was found at all levels in the aquifer including the deep aquifer.⁵⁸ Where is the Navy's notification to ATSDR advising them of the existence of this portal and the 1.1 million gallons of fuel trapped in the ground at Hadnot Point? What does the Navy and the Marine Corps stand to gain if the public, the scientists and Congress were not aware of the extreme nature of the loss fuel at the HPFF?

The Confirmation Study for Camp Lejeune commenced in May of 1984 with the release of the Work and Safety Plan. The work plan detailed how and where the sampling for the Confirmation Study was executed. The plan also detailed the schedule of the project and what reports were required by the contractor. The contractor was an Environmental Engineering firm from Gainesville, Florida known as Environmental Sciences Engineering (ESE). A monthly progress report was required by the 15th day of each month for the duration of the contract. The tests results were scheduled to be evaluated between June and August and a draft report prepared by the end of August. The Final report was scheduled to be completed by 10 September 1984 and the presentation made on the same date.⁵⁹ According to the May/June progress report, work was underway and 14 ground water monitoring wells were installed. The engineer noted a one week delay due to decontamination of equipment.⁶⁰ The June/July progress report advised the LantDiv engineer in charge of the Confirmation study that 36 of 75 wells (this number included monitoring wells drilled for the study) were sampled. The sampling included site 22, the Hadnot Point Fuel Farm and well HP-602 (sampled 6 July 1984). A two week delay was noted due to equipment problems and the re-drilling of five new wells to replace wells inadvertently contaminated by an ESE subcontractor. The project was scheduled for completion on 4 August 1984. The samples were shipped to ESE laboratory in Gainesville, Florida for analysis.⁶¹ After the 15 July progress report all documentation regarding ESE's efforts on the Confirmation Study ceased until January of 1985. The August progress report and all subsequent progress reports are missing, as is the draft report summarizing the evaluation of data from the sampling.

The only clue to what transpired during the missing months between July 1984 and December 1984 recently surfaced a few months ago when we located a State of North Carolina document written by Rick Shiver, N.C. Regional Hydrologist. The document was titled *Groundwater Pollution Source Inventory* and discussed the HPFF and the multiple leaking underground storage tanks (UST). The inventory is

⁵⁷ USMC CL Booklet, page 18, July 2010.

⁵⁸ Excerpt from Document #1185. This document was found by ATSDR within the recently discovered limited access web portal for the Navy's Underground Storage Tank Program, NavFacEngCom.

⁵⁹ Cerlca 337, Pdf page 33, May 1984.

⁶⁰ Cerlca 3428, June 1984.

⁶¹ Cerlca 3429, July 1984.

dated 1 August 1984 and located in the groundwater pollution box is a handwritten circle indicating that the groundwater pollution was confirmed.⁶² At the time of this report, the State of North Carolina was supposedly not privy to the details of the Confirmation Study then underway at Camp Lejeune. The contractor was not required and did not report their findings to anyone else but the Navy personnel at LantDiv. What basis did Mr. Shiver have to conclude that the groundwater at the HPFF was contaminated with gasoline three months before the Marine Corps allegedly received ESE's Confirmation Study report revealing fuel contamination at the HPFF and potable well HP-602.

Last year Senators Burr and Hagan posed a series of questions about Camp Lejeune to the Marine Corps. One of these questions asked why the Navy and Marine Corps waited until 30 November 1984 to close well HP-602. The Navy/Marine Corps replied:

"According to the record, the Marine Corps did not "wait" to shut down well HP-602. Well HP-602 was taken out of service as of 21 November 1984 as part of the normal rotation of well (CLW 1089). Records indicate that the results from the 6 July 1984 sample were received by the base on 30 November 1984 (CLW 4546). Upon receipt of the sample results, well HP-602 was never reactivated and was permanently taken out of service."⁶³

The document titled CLW 1089 is a Question and Answer sheet prepared for the base Environmental Engineer, Robert Alexander in advance of a media interview concerning the contamination found at Camp Lejeune. Judging from the context of the document, mainly the omission of well HP-651 discovered contaminated in February 1985, the document was most likely written in December 1984. Mr. Alexander stated that benzene and industrial solvents were found in well HP-602 and then cited test results implying they were the results which closed well HP-602 in November of 1984. In fact, the test results on the Q&A sheet were collected on 3 December 1984, after the 30 November 1984 date in which the Marine Corps states that the base was allegedly notified that well HP-602 was contaminated and then closed. This mischaracterization of why well HP-602 was closed remained a fact until 2009. Mr. Alexander then wove a false sense of security for those potentially exposed by informing the community that all of the wells were located in the industrial area approximately 1 mile from the barracks.⁶⁴ Did this mean that the wells only served the shops and offices in the industrial area and not the barracks? If well 602 was closed as a result of the receipt of ESE's Confirmation Study results, then why was the July 1984 380 ppb finding omitted from the Q&A sheet? If well HP-602 was taken off line due to a normal rotation, then where are the well and plant production log books to support the Navy/USMC position? To date, the log books are all missing from the historical record for Camp Lejeune. The Navy and Marine Corps also cite CLW 4546 as evidence that they closed well HP-602 upon receipt of the ESE Confirmation Study. The document was written after the Bob Alexander Q&A sheet and at least three months after well HP-602 was closed.⁶⁵ The lack of primary supporting evidence on how the contamination at Hadnot Point was discovered is extremely disturbing. Why is everyone trusting the very entity who polluted the drinking water aboard Camp Lejeune to tell and not show us how it happened? Where is the November transmittal sheet for the ESE Confirmation Study? Where is the draft ESE Confirmation Study due in August 1984? Where is the telephone record log or memorandum to the base ordering them to close well HP-602 on 30 November 1984? Why was the Hadnot Point WTP tested for benzene only after the contaminated well was closed? Where are the missing progress reports from ESE? Where are the missing well and plant production log books? Every shred of evidence which would either condemn the Navy and Marine Corps or exonerate them is missing. Why?

A December 1984 base news paper article assured their readers that none of the organic compounds found in the base's water were listed under the Safe Drinking Water Act. The article ended with a chilling quote from the base environmental engineer, Robert Alexander:

⁶² North Carolina Groundwater Pollution Inventory, Rick Shiver, August 1980

⁶³ USMC Response to Senator Burr and Hagan Queries on Camp Lejeune, Pdf page 11, July 2009.

⁶⁴ CLW 1089, December 1984.

⁶⁵ CLW 4546, February 1985.

"Every effort will be made to maintain the excellent quality water supply traditionally provided to the residents of Camp Lejeune."⁶⁶

Finally on 8 January 1985 a memo from LantDiv indicated that the Navy agreed to officially look at the other systems on the base for possible drinking water contamination. ESE, the Confirmation Study contractor was then assigned the task to sample all of the wells on the base for VOCs.⁶⁷ The ESE Evaluation of Data Report was released a week later. According to the project schedule previously discussed, the report was due in September 1984 and was four months late. Within the report, ESE indicated that there was extensive fuel contamination at the HPFF. The contractor wrote in their report:

"Of extreme importance is the high level of benzene (380 ppb) detected in the sample collected from the deep water supply well No. 602 (Well 22GW3). This benzene concentration far exceeds the 10 to minus 5 human health risk limit of 6.6 ppb; therefore, the use of this well should be discontinued immediately."

On the margin a curious handwritten from an unknown LantDiv official note reads:

"We must send them our (1141's) report on well data, what it means and what wells to keep shut down."

"The absence of contamination at Well 22GW2 indicates that the migration pathway is deep and not shallow."⁶⁸

The Evaluation of Data report did not discuss the VOCs found in Tarawa Terrace beginning in 1982 and no wells in that system were sampled during the July 1984 testing period. The report also noted that subsequent to the July 1984 testing, well HP 602 experienced a dramatic increase in organic solvents after further testing by LantDiv. They concluded that the main industrial area was a logical source of the solvents.⁶⁹ This industrial area included the HPFF, the base maintenance shops, and building 1115 (the former Fleet Refueling and Service area). Also included in the industrial area were several water supply wells, among them was well HP-602. These wells all served the Hadnot Point WTP and were a source of drinking water for the service men, women and their families living within the treatment plant's service area. Later that year, when the State of North Carolina asked for copies of the ESE report, the Marine Corps refused:

"as the Marine Corps disagrees with the conclusions in this report, it will not release a copy of it to any outside agency."⁷⁰

VOC contamination in well HP-651 and Tarawa Terrace

By then end of January 1985 it appeared that LantDiv and base officials had a handle on the VOC contamination found at Hadnot Point. They had closed 10 supply wells for the system and the water treatment plant appeared to be free of benzene and TCE. Two phone calls from residents in Paradise and Berkley manner set off a series of events which ultimately changed the course of the contamination story. The calls were concerning a gasoline smell in the drinking water provided by the Holcomb Boulevard WTP. The calls resulted in the discovery of a leaking generator fuel line at the treatment plant allowing gasoline to collect in the plant's reservoir. The plant was shut down and two connecting transfer valves were opened allowing Hadnot Point to supply water to the service area served by Holcomb Boulevard.⁷¹ Prior to 1972, the Holcomb Blvd area was serviced by the Hadnot Point WTP and the intra-connection was preserved when the new plant began production. From January 27th through February 4th, Hadnot Point supplied all the treated water for Hadnot Point and the Holcomb Blvd systems. During this time, the Holcomb Blvd system was repeatedly flushed and cleaned. The state was brought in and split water samples were taken after the plant was cleaned.⁷² However, unbeknownst to Navy and Marine Corps officials, one contaminated well had been missed in earlier testing for VOCs.

Well HP-651 was located along Piney Green Road and immediately adjacent to Lots 201 and 203, the base junkyard. Lots 201 and 203 was one of the 22 sites tar-

⁶⁶ Cercla, 523, December 1984.

⁶⁷ CLW 1105, January 1985.

⁶⁸ Cercla 388, Pdf pp 48-52, January 1985.

⁶⁹ Cercla 388, Pdf page 52, January 1985.

⁷⁰ CLW 4869, Pdf page 5, October 1985.

⁷¹ CLW 4514, February 1985.

⁷² CLW 4546, February 1985.

geted for additional study but for some reason, well HP-651 was not selected to be sampled in July 1984.⁷³ The well site selected in 1971 by LantDiv engineers and installed in 1972. It is not known whether the engineers involved in selecting the site for well HP-651 were knew of BUMED 6240.3c and the preventive measures built into the Navy's potable water regulations. It was their job to know and comply with these regulations. How could they possibly begin to justify the selection of a potable water supply well site less than 300 feet from the base junk yard and the base VOC disposal area (site 82).⁷⁴ This one well was the sole source for the horrific VOC readings found in the January 1985 samples taken from the Holcomb and Hadnot Point WTP service areas received in February of 1985.⁷⁵

	From Distribution Pump	Bottom of Reservoir	Middle of Reservoir	Top of Reservoir	Fire Hydrant
TCE Reading	900.02 ppb	24.2 ppb	25.8 ppb	26.8 ppb	849.0 ppb
DCE Reading	321.3 ppb	7.4 ppb	7.8 ppb	7.6 ppb	340.0 ppb
Location	Berkley Manor Elem.	MOQ 2212 Cold Water Chief of Staff residence	MOQ 2212 Hot Water Chief of Staff residence	Building PP 2600 Firehouse	Tank S-2323 Water Storage Tank
TCE Reading	1148.4 ppb	724.7 ppb	612.9 ppb	890.9 ppb	407.1 ppb
DCE Reading	406.6 ppb	249.4 ppb	201.2 ppb	332.4 ppb	159.0 ppb
Location	Married officer's Qtrs Fire Hydrant MOQ 2204	Tank SLCH 4004 Storage Tank	Bldg BM 5677	Bldg BM5531	
TCE Reading	839.6 ppb	318.3 ppb	981.3 ppb	905.5 ppb	
DCE Reading	307.6 ppb	107.5 ppb	368.7 ppb	335.0 ppb	

Well 651 was sampled and closed on 4 February 1985. The tests were completed on 8 February 1985. Both the January and February samples taken from well HP-651 were contaminated with extreme amounts of organic solvents.

Samples for Well 651	PCE	TCE	DCE	Vinyl Chloride
January 16, 1985	386 ppb	3,200 ppb	3,400 ppb	655 ppb ⁷⁶
February 4, 1985	400 ppb	18,900 ppb	7,580 ppb	168 ppb ⁷⁷

In their apparent attempt to demonstrate to the State of North Carolina their good stewardship of the environment, the Navy and Marine Corps inadvertently and independently documented the worst VOC contaminated supply well on the base and its corresponding affect on the finished water supplied to the residents of Camp Lejeune.

The Tarawa Terrace (TT) water distribution system test results for VOCs were received on the heels of the confirmation of contamination in well HP-651. Just as Mike Hargett and Bruce Babson had warned the base in 1982, The Tarawa Terrace well field was highly contaminated with VOCs, Specifically wells TT-26 and TT-23.⁷⁸

Samples taken	PCE	TCE	DCE	Vinyl Chloride
1/25/85				
TT-26	1580 ppb	57 ppb	92 ppb	27 ppb
TT-23	132 ppb	5.8 ppb	11 ppb	0 ppb

A subsequent test found the finished water provided to the families at Tarawa Terrace contained 215 ppb of PCE.⁷⁹ The contaminated wells were then immediately closed, almost three years after the initial warning from Mike Hargett and Grainger Laboratory.

The water supply problems at Tarawa Terrace presented the Navy and Marine Corps a different and more complex problem than with the Hadnot Point and Holcomb Blvd WTPs. Like the other treatment plants, the TT system served a large residential population with treated water. Unlike the other two systems on main-

⁷³ CLW 709, Pdf page 18, April 1983.

⁷⁴ Cercla 429, Pdf page 43, August 1991.

⁷⁵ CLW 2253, Pdf page 2, May 1993.

⁷⁶ CLW 5594, Pdf page 34, February 1985.

⁷⁷ CLW 5237, Pdf page 23, February 1985.

⁷⁸ CLW 5570, Pdf pp 18& 24, February 1985.

⁷⁹ CLW 5237, Pdf page 33, February 1985.

side, there was not intra-connection in the advent of an emergency. To further complicate the issue, the availability of raw water for the TT well fields was limited. Even before the closure of wells TT-26 and 23, TT was experiencing trouble with the availability of raw water for the treatment plant. A memo from W. R. Price, the Utility System Operator General Foreman, warned that the existing well field was unable to keep with the demands placed on the TT system and that continued over use of the wells in the system without periodic rest could lead to well failures.⁸⁰ With the closure of wells TT-26 and TT-23, Tarawa Terrace was expected to experience a 300,000 gallon per day shortfall of water for the residents of TT.

On 1 March 1985, a staff meeting for the Assistant Chief of Staff, Facilities was held on the base. The purpose of the meeting was to discuss water alternatives for Tarawa Terrace. A list of seven alternatives was developed by Colonel Lilley, Assistant Chief of Staff, Facilities.

1. Install a new well at Tarawa Terrace. The problem with a newer well was that water, in significant quantities was difficult to locate at Tarawa Terrace. Estimate cost: \$80,000.
2. Transport water via tanker trucks from other water plants. However, the logistic of hauling 300,000 gallons per day was questionable. Estimated cost: \$2,000 per day.
3. Tap into existing City of Jacksonville water line under Lejeune Blvd. There was a concern that the city may not be able to provide the water and there was a fear that the city would request reciprocating favors to the Marine Corps. Estimated cost: Unknown.
4. Change the existing contract for Holcomb Blvd to construct a water line to Tarawa Terrace immediately. The contractor was thought to be unable to perform this option in the time frame required. Estimate cost: Unknown.
5. Construction of a 8inch raw water line from Brewster Blvd to Tarawa Terrace across the railroad trestle on Northeast Creek. At the time, it was unknown if the state would approve the measure. Estimated Cost: \$75,000.
6. Modify Tarawa Terrace plant to include aeration or granular activated carbon unit capable of removing VOCs. The alternative was rejected because of they felt the modifications could not be made in the time frame required. Estimated Cost: \$300,000.
7. **Re-activate and use contaminated well(s) that have been closed if required to maintain adequate water levels and pressure.** Lack of Federal MCLs for VOCs or restrictions for using VOC contaminated *water is used to justify this measure.* However, the brief also reads "the potential health hazards must be weighed against the need and cost of providing water from other sources." (Please see entry for BUMED 6240.3B and 6240.3C and note the language concerning chemicals in the water: "*substances which may have a deleterious (harmful) physiological effect or for which the physiological effects are not known, shall not be introduced into the water system in a manner which would permit them to reach the consumer.*" Estimated Cost: zero.

Alternative 5 was selected for implementation but the estimated completion date was 5 June 1985 and state approval for the project was needed. There was no discussion concerning how to provide for the impending water shortage during while the auxiliary line was under construction.⁸¹ Two days prior to the meeting, a letter from the Calgon Activated Carbon Division in response to a LantDiv inquiry about emergency potable water treatment systems for VOCs arrived at LantDiv. Calgon advised LantDiv that based on the organic solvent and its corresponding concentration supplied by LantDiv, they could deliver as system capable of treating the potable water within 24-48 hours.⁸² The Calgon system was never ordered. According to Marine Corps documents, VOC contaminated well TT-23 was operated and supplied water to the residents of Tarawa Terrace on at least three different occasions until the temporary water line was completed in June of 1985.⁸³ The Tarawa Terrace WTP was finally closed on 1 March 1987. According to the water model completed by ATSDR in 2007, Tarawa Terrace remained contaminated with VOCs throughout this time period.

⁸⁰ CLW 707, March 1983.

⁸¹ CLW 1129, March 1985.

⁸² CLW 6520, February 1985.

⁸³ CLW 1237, May 1985.

The USMC's Camp Lejeune contaminated drinking water media and public relations campaign.

At no point between the first warning of a problem with the base water supply discovered in October 1980 and the appearance of the first announcement informing the residents of the base that their drinking water was contaminated in December 1984, were any of the residents and the State of North Carolina informed about the contaminants found in the Hadnot Point and Tarawa Terrace drinking water systems. The first indication of a problem from the Marine Corps was an article announcing the commencement of the Confirmation Study. The article appeared in the base newspaper and was titled "*Environmental Study kicks-off*" Col. Lilley advised the residents of the base that"

"while contractors will routinely wear personal protective equipment such as chemical resistant overalls, we do not expect to expose anyone to any contaminants. The results of the survey are due in August 1984. If any contaminants are discovered, a review of alternatives will determine action necessary to meet health and environmental standards."⁸⁴

What the Colonel failed to inform the residents was that they were already being exposed. The survey referenced in the article was the Confirmation Study.

The first announcement of drinking water contamination occurred in December 1984 when the base newspaper informed the residents of Camp Lejeune that:

"Environmental officials here are taking precautionary measures to ensure drinking water is free from possible contamination."

"As a result of water sampling taken on 3 December, four wells in the Hadnot Point industrial area were found to contain some traces of organic contamination."

"none of the compounds noted in the test samples are listed in the regulations under the Safe Drinking Water Act."

"Testing is being conducted as part of a basewide confirmation study which is currently underway to verify whether any groundwater contamination exists."

"Daily water samples are being taken from the water treatment plant to ensure drinking water remains within prescribed federal and state guidelines established by the Safe Drinking Water Act."

"Every effort will be made to maintain the excellent quality water supply traditionally provided to the residents of Camp Lejeune."⁸⁵

On 30 April 1985, the Commanding General of Camp Lejeune issued a *Notice to Residents of Tarawa Terrace* informing them that two supply wells for TT were taken off line because "minute (trace) amounts of several organic chemicals have been detected in the water." The general then stated there were no definitive State of Federal regulations for the "compounds" and that as a "precaution" he ordered them closed. The remainder of the memo discussed the impending water shortages expected at Tarawa Terrace. At no point were the residents informed that well TT-23 had been used to supply water to them after its closure.⁸⁶ The next series of newspaper articles appeared in May 1985. The *Jacksonville Daily News* titled their article "*Chemical discovered in Lejeune water wells.*" The article informed the reader that:

"Substances found in the wells were described today as volatile organic chemical by Gunnery Sgt John Simmons of Lejeune's Joint Public Affairs Office. He said he had no information on whether the well water was dangerous to humans."⁸⁷

The *Wilmington Morning Star's* article was contained more details and false assurances than the *Daily News*. The State head of the Water Supply Branch which regulates drinking water in North Carolina was quoted as stating"

"he did not think Camp Lejeune residents need to worry about getting bad drinking water. I think we kind of caught it right at the beginning."

⁸⁴ Cercla 132, Pdf page 6, June 1984

⁸⁵ Cercla, 523, December 1984.

⁸⁶ CLW 1191, April 1985.

⁸⁷ Cercla 132, Pdf page 7, May 1985.

Another paper expanded this quote to include “It’s not something that has been running for two or three years.”⁸⁸

Base Spokesman Gunnery Sergeant John Simmons ended the article with what has become a standard Marine Corps anthem regarding the Camp Lejeune drinking water contamination and then wrapped it in a total fabrication.

“Simmons stated that while there were no state or federal regulations that mandate an unacceptable level of such contaminants in drinking water, “we ordered the closure of all wells that showed even a trace amount.”⁸⁹

These three articles and the general’s notice to Tarawa Terrace constituted the first notifications that personnel and their families aboard Camp Lejeune received for an exposure that they could not touch, taste, see nor hear. They were relying on the Marine Corps to protect them and their families and for their trust they received and continue to receive betrayal.

As time passed between the discovery of the drinking water contamination and the news reports the Marine Corps’ story began to change. An important point to remember is that Camp Lejeune, like many military bases, has a large mobile population. Some families spent years at the base while others rotated out over a period from months to years. By September of 1985, the Marine Corps’ story became more direct as evidenced by a quote from the base Environmental Engineer, Robert Alexander, the same person who received Betz’s memo in January 1983 concerning Grainger’s tests performed on the Hadnot Point and Tarawa Terrace WTPs and the water provided to the system’s consumers:

“Alexander said the 22 sites are not considered dangerous because only trace amounts of contamination have been found to have escaped from the dumps. He said that people had not been directly exposed to the pollutants.”

“the last thing we want to find is that there is a large piece of Camp Lejeune that can’t be used because of toxic waste disposal.”

“Alexander said there is no clear relationship between the closing of the wells and any specific waste site.”

“The way we got onto the well problem was in sampling near one of our fuel farms, or fuel storage facilities. We sampled nearby wells. In one near the fuel farm, we didn’t detect fuel but did detect organic solvents.”⁹⁰

The same article also informed the reader that:

“Eight (wells) had been tainted by small amounts of fuel and solvents used to clean weapons and vehicles. Solvents found in two of the wells, in a residential neighborhood at the northern edge of the base, have been tentatively linked to civilian dry-cleaning firms in nearby Jacksonville.”

“No one has been harmed by the wastes.”

“Linton (EPA) said the most serious problem at Camp Lejeune was contamination of the groundwater with solvents that are suspected of causing cancer.”

“Col. Tiebout, Camp Lejeune’s assistant chief of staff for facilities characterized all of the actions so far—closing wells, relocating the day care center, and extensive testing—as precautionary measures.”⁹¹

In the public arena, fact was becoming fiction and the Marine Corps’ spin on what transpired at the base between 1980 and 1984 was rapidly solidifying into reality. Behind the scenes, the EPA moved to force Camp Lejeune onto the National Priority List (NPL) also known as the Superfund list. In a meeting which took place at the base in November of 1985, Robert Alexander told the EPA that their contractor’s report was in error and resisted the idea of placing the base on the NPL.⁹² Somehow or another, the EPA walked away with the idea that no contamination was detected in treated potable water at the Hadnot Point WTP.⁹³ Two weeks after this meeting,

⁸⁸ Cercla 132, Pdf page 11, May 1985.

⁸⁹ Cercla 132, Pdf page 7, May 1985.

⁹⁰ CLW 4855, September 1985.

⁹¹ CLW 4855, September 1985.

⁹² CLW 4903, November 1985.

⁹³ CLW 5430, February 1986.

the treated water at the Hadnot Point WTP was sampled and found to contain benzene in the extreme amount of 2,500 ppb.⁹⁴ The analytical data sheets for this test and a subsequent benzene finding several weeks later are both missing. There are no known notifications of this finding to the residents at Camp Lejeune and the words "Not Representative" were handwritten over the 14 November 1985 test results for the Hadnot Point WTP. The false contention that people were not directly exposed to the pollutants appeared again in a media story detailing the contamination written in January 1986.⁹⁵

On Christmas Eve 1987, the Jacksonville Daily News again repeated Robert Alexander's September 1985 assertion that people had not been directly exposed to the pollutants. The paper also informed the public that the EPA was considering Camp Lejeune for the NPL. The contamination steadily devolved into "traces of TCE, DCE and PCE." The fuel found at Hadnot Point had entirely disappeared in the media.⁹⁶

Colonel Thomas Dalzell, Assistant Chief of Staff, Facilities was designated as the overall coordinator for Camp Lejeune's incorporation onto the National Priorities List. In February 1988, he was featured in a question and answer press release which became the basis for several media news stories on the drinking water contamination aboard the base.

"Q. Is my health or the health of my family in any danger?"

A. No it's not. All the wells which we get our raw water out of are continually tested and the wells that were identified as being contaminated have been closed off."

"Q. What about prior to 1983?"

A. At that time we were not aware of any of these particular compounds that might have been in the ground water and we have no information that anyone's health was in any danger at that time."

"Q. What are the long term effects of exposure to these contaminants?"

A. Heavy long term exposure to these chemicals could cause some health hazards, depending on the amount of chemical ingested."

Q. What was the source of the contamination?"

A. Most of the sources of contamination were the motor pools that existed down in the Hadnot Point area. At that time oil, greases, solvents, gasoline and cleaning fluids and other types of chemicals were just being dumped in the ground or dumped in sewers or things like that; and we were really not aware back in the 60's and 70's of the effects on ground-water contamination. Now we are more aware of these things and have taken appropriate precautions to ensure the ground water contamination is not progressing any further."⁹⁷

How could the man placed in charge of coordinating the placement of Camp Lejeune on the NPL be ignorant of the fact that warnings about the contamination began in October of 1980? Was his claim that there was no knowledge of the drinking water contamination prior to 1983? Was this misrepresentation fabricated by design or ignorance?

The massive Hadnot Point Fuel Farm fuel spill surfaced again in late 1988. The attention was more than likely due to the impending release of O'Brien and Gere's Final Report for the Contaminated Ground Water Study at Hadnot Point.⁹⁸ The engineer's report detailed large losses of fuel from the HPFF and a fuel plume 15ft thick was identified floating in the semi confined aquifer at Hadnot Point. Once again, Marine Corps statements in the media did not match up what was actually known at the time. A *Jacksonville Daily News* article titled "Base officials study cleanup of fuel leaks" appeared in print in October.

"leaks from an underground tank system were confined to an are two square blocks around the fuel farm."

"The spill is contained by the section's natural flat terrain and water table conditions."

"the number of gallons leaked is unknown."

⁹⁴ CLW 1406, January 1986.

⁹⁵ Cercla 132, Pdf page 18, January 1986.

⁹⁶ Cercla 132, Pdf page 20, December 1987.

⁹⁷ Cercla 132, Pdf page 28, February 1988.

⁹⁸ Cercla 417, December 1988.

“Cleanup is expected to start after final design of glue/ recovery system. Recovered gasoline products are expected to be recycled for use on the base.”⁹⁹

By the following year, the base was ready for listing on the NPL and the old pattern of “no single source had been found for the chemicals (solvents) along with the 1983 IAS conclusion that none of the 22 sites selected for further investigation posed an immediate threat to human health were rehashed in the media.¹⁰⁰ Of the 22 sites, the Hadnot Point Fuel Farm was designated as the first site to be cleaned up once Lejeune was placed on the Superfund list.¹⁰¹ Camp Lejeune was officially added to the NPL in October 1989. Shortly before the base was listed on the NPL an article appeared in the base newspaper featuring Base Supervisory Chemist, Elizabeth Betz who had laboriously documented the early stages of the contamination from May 1982 through January 1983.

“You’d have to look at each VOC individually, but many of them are carcinogens. That’s the main reason we immediately shut the wells down, although the levels we found in the tests were not near the EPA limit.”

“We were puzzled when the chemicals showed up. At first, we couldn’t figure out how it had gotten into the Tarawa Terrace system. Then we looked across Highway 24. There were dry-cleaning businesses right across the road from the housing area.”

“Once you have identified where the potential for a threat is, you start taking action to correct it. You can not leave a contaminant in the groundwater.”¹⁰²

The Marine Corps controlled the message and information surrounding the details of the drinking water contamination at Camp Lejeune. With the addition of Camp Lejeune onto the NPL, the Marine Corps was required to establish and administrative record for public use. This repository is located in the Onslow County Public Library. The problem is that a large number of personnel and families exposed at Camp Lejeune no longer live near the base to have access and view the CERCLA library. Beginning in the mid to late 2000’s, the Marine Corps placed portions of the administrative record on the internet. The online library is known as the “Baker website.” This website is cumbersome and largely unusable. A brief document library appeared on the USMC’s website but was removed after the Congressional hearing in 2007. Without access to original sources of information, the affected community is left to the mercy and whim of the Marine Corps. A breakthrough in gathering information occurred in 2007 with the release of ATSDR’s water model for Tarawa Terrace. The corresponding discs contained electronic files of the Marine Corps’ Camp Lejeune Water document library and the Cercla administrative record. Through these discs the affected community has had the opportunity to educate ourselves and revisit the Marine Corps’ version of what happened at Camp Lejeune.

Our advantage is the Corps told their lies up front. The truth is in their documents and they do tell a far different story than what the Marine Corps has asserted to the media and Congress. What is now needed is for an authoritative body such as Congress to work objectively with the Marine Corps and the affected community to ascertain what really happened at Camp Lejeune and what chemicals we were exposed to in our drinking water aboard the base. The stumbling block is that our government is the source and remedy for this issue and there is an inherent conflict of interest in securing the full and objective co-operation of the various agencies capable of providing the answer and ultimate relief from our exposures.

The recent Marine Corps informational brochure proudly boasts that the USMC has investigated three separate times and found to be exonerated of blame in the contamination.¹⁰³ Each of these prior investigations occurred before the release of the initial electronic document library to the public and our subsequent enlightenment of what transpired at Camp Lejeune during the contamination period. Both the Commandant’s 2004 Blue Ribbon panel and the Government Accountability Office (GAO) 2007 Report on Camp Lejeune share a common fatal flaw. Each report failed to identify the true extent of the fuel problem at Hadnot Point, the Navy and Marine Corps’ own internal directives and standards for potable water systems aboard Naval vessels and facilities, including Camp Lejeune and the Marine Corps’s 1974 Base Order identifying Organic Solvents as hazardous materials. Each report

⁹⁹ Cercla 132, Pdf page 36, October 1988.

¹⁰⁰ Cercla 132, Pdf page 47, August 1989.

¹⁰¹ Cercla 132, Pdf page 57, October 1989.

¹⁰² CLW 1854, August 1989.

¹⁰³ USMC CL Booklet, Page 13, July 2010.

failed to locate and interview the owner and lead chemist from Grainger Laboratory concerning the events in 1982. Instead, the reports relied on LantDiv and base employees who, to one degree or another, seemed to suffer a collective form of selective memory. In fact, during the 2007 Congressional "Poisoned Patriots" hearing, Chairman Bart Stupak asked the EPA's Special Agent, Tyler Amon if he had personally recommended that obstruction of justice charges be brought up against the former LantDiv and base personnel who appeared to have been coached and were uncooperative with his investigation. Agent Amon confirmed that he had identified areas of concern for obstruction of justice charges but these recommendations were overruled by the Department of Justice.¹⁰⁴ This same department is currently tasked with representing the government (the Navy and USMC) for any and all Federal Tort claims filed because of the Camp Lejeune drinking water contamination. This blatant lack of objectivity by the Department of the Navy continues to this day. Early this summer, the Secretary of the Navy established a Camp Lejeune Assistance Team (CLAT) in response to the pressure placed upon the Navy by Congress, the media and the affected community over the recent discoveries pertaining to the Hadnot Point Fuel Farm and the electronic portal. The CLAT is tasked to provide a report to Secretary Mabus. There is no input whatsoever from the affected community nor is there any shred of independent oversight or objectivity. Members of the CLAT are required not to do anything which may compromise the Navy's legal defense against the families. All in all, the CLAT, as with the prior government investigations into Camp Lejeune's contaminated drinking water, sounds like a classic case of the "Emperor's New Clothes"

Perhaps one the most important single recent event in the Camp Lejeune contaminated drinking water story occurred last April when the ATSDR withdrew their flawed public health assessment (PHA) for Camp Lejeune. The assessment was fraught with errors including but not limited to, improper usage of exposure duration and dosage models used to characterize our risks for adverse health outcomes, the disappearance of the assessments supporting references and interviews, and the omission of benzene from the 1997 Camp Lejeune Public Health Assessment.¹⁰⁵ The Camp Lejeune PHA failed to recognize that our exposures on the base surpassed mere occupational settings. The models used to evaluate our exposures failed to account for the fact that the resident population on the base was exposed 24 hours a day and 7 days a week throughout the year. The PHA also underestimated the amount of contaminated water consumed by the personnel exposed on the base. To add insult to injury, the supporting interviews and documentation for the agency's work on the assessment were allegedly "accidentally destroyed" by a contractor after the assessment was published. What this meant, was that there was no way for other scientists or the affected community to fact check ATSDR's work. The breaking point for ATSDR came when members of the Community Assistance Panel (CAP) for Camp Lejeune correctly identified that well HP-602 was discovered contaminated with fuel products while the well was actively pumping water for the Hadnot Point Water Treatment Plant. ATSDR's leadership found their prior position that no direct proof existed that benzene was in our water, suddenly untenable. On 28 April 2009, the ATSDR withdrew their Camp Lejeune PHA at our CAP meeting held in Atlanta. This event was the first time a PHA was withdrawn in the agencies history.

The ATSDR PHA for Camp Lejeune was not the only report which failed to address the benzene exposure at Camp Lejeune. In June of last year, the National Research Council (NRC) released their controversial report on Camp Lejeune.¹⁰⁶ This report was the result of well intended, but poorly overseen legislation, in which the Department of the Navy was allowed to write the charge, or directions to the scientist on how to conduct their review of scientific literature concerning the chemicals we were exposed to at Camp Lejeune. The committee focused their efforts on PCE and TCE and omitted benzene in their evaluations and assessments. I am not a scientist and thus not qualified to comment on the specifics of why the report is flawed. This area has been openly addressed by other scientists including one who participated in a peer review of the NRC report and who is present today as a witness before the committee. I will defer discussion of the scientific issues about the validity of the NRC to Dr. Richard Clapp of Boston University. However, there are some non scientific issues that have come to light concerning the report. First and

¹⁰⁴ Official Transcripts for the "Poisoned Patriots: Contaminated Drinking Water at Camp Lejeune" hearing, Subcommittee on Oversight and Investigations of the Committee on Energy and Commerce, House of Representatives. Pdf page 144. June 2007.

¹⁰⁵ ATSDR Website, <http://www.atsdr.cdc.gov/hac/pha/pha.asp?docid=1082&pg=0>

¹⁰⁶ National Research Council, "Contaminated Water Supplies at Camp Lejeune: Assessing Potential Health Effects, June 2009.

foremost, shortly after the report was released to the public, we discovered that the National Academy of Science entered into a \$600,000 contract with the Department of Defense to effectively serve as the DOD's hired gun and consultant for work at Camp Lejeune. What was more disturbing was that the contract was negotiated and signed while the NRC committee was engaged in their work on the Camp Lejeune NRC report.¹⁰⁷ Earlier this year, we learned that the National Academies quietly dissolved the contract with the DOD.

Shortly after the NRC report was released, the Marine Corps mailed a letter signed by Major General Payne to every registrant with the Marine Corps for Camp Lejeune. The letter notified the registrants that ATSDR withdrew their PHA for Camp Lejeune because of the omission of benzene contamination but was written in such a way as to infer the NRC committee did review and assess the benzene exposures at Camp Lejeune.¹⁰⁸ What is puzzling is that much of what we now know about the benzene contamination was not provided to the NRC reviewers. Like ATSDR, there are no supporting documents indicating that the NRC Committee members knew of the existence of up to 1.1 million gallons of fuel lost into the groundwater at Camp Lejeune.¹⁰⁹ It is a mystery how the Marine Corps and Major General Payne are able to conclude that the NRC did indeed evaluate and assess our benzene exposures in the drinking water at Camp Lejeune.

Just how did the Hadnot Point Fuel Farm's massive fuel loss escape the attention of ATSDR in their 1997 PHA? We may never know the complete answer to that question but what the historical documents make clear is that ATSDR should have known about our benzene exposures, investigated them and assessed the risk of those exposures. The Navy and Marine Corps were also complicit in casting a shroud over the fuel losses at the Hadnot Point Fuel Farm. It was their base, their facility where the contamination occurred, their documents detailed the extent of the contamination and their people were the ones exposed. The Navy and Marine Corps had a moral obligation to ensure the State and Federal regulatory agencies, especially the ATSDR knew we were exposed to benzene. If the subcontractor for the ATSDR had not found the UST portal in 2009, just when did the Navy and Marine Corps plan to disclose the fuel losses at Hadnot Point? Was this a game of catch me if you can?

The defunct ATSDR PHA did contain a reference to a Marine Corps sponsored report on the Hadnot Point Industrial Area issued in May of 1988. Contained on page 18 of 373 is a statement by the contractor in which benzene was described as a contaminant in well 602. The lost fuel was also found in the deep aquifer at Hadnot Point.¹¹⁰ There was no excuse for the personnel working for ATSDR at that time to have missed this vital fact which confirmed benzene was a major contaminant at Camp Lejeune. However, with this being said, once it was established that the ATSDR was in error, the 1997 PHA for Camp Lejeune was rescinded. The same was not true for the polluter. Instead of acknowledging their role in the omission of benzene in the PHA by ATSDR, the Navy and Marine Corps leveled sole blame at the ATSDR:

"If benzene was not fully addressed in the PHA, it was not for lack of data."¹¹¹

According to Col Tokarz's March 1988 letter concerning the Hadnot Point Fuel farm, the upcoming Technical Review Committee (TRC) was slated to discuss the details about the HPFF and fully explain the situation to the members of the committee which included the community and representatives of the EPA.¹¹² Four months later, the first TRC meeting took place aboard Camp Lejeune. The TRC was a requirement of CERCLA and served to bring the affected community, DOD and EPA together to discuss developments for cleaning up the base. When the time came to discuss the Hadnot Point Fuel Farm, as promised in Tokarz's letter, something entirely different happened:

¹⁰⁷ Chairman Subcommittee on Investigation and Oversight, Committee on Science and Technology Brad Miller Letter to Dr. Ralph Cicerone, President National Academy of Sciences, November 2009. With attachments.

¹⁰⁸ USMC letter to Camp Lejeune Registrants, General Payne USMC, June 2009.

¹⁰⁹ Excerpt from Document #1185. This document was found by ATSDR within the recently discovered limited access web portal for the Navy's Underground Storage Tank Program, NavFacEngCom.

¹¹⁰ Cercla 258, May 1988.

¹¹¹ USMC Response to Senator Burr and Hagan Queries on Camp Lejeune, Pdf page 10 July 2009.

¹¹² Cercla 96, Pdf Page 33-34, March 1988.

Cheryl Barnett, LantDiv: "Well, they're part of the other 22 sites that we said we are looking at, we just don't have any data to present to you today."¹¹³

Earlier in the meeting, the base environmental engineer was asked what kind of readings were found in the water samples from the 1980's. Mr. Alexander who was present during that time period and fulfilled the role of base environmental engineer stated:

"We had very little, if any data, before we realized our groundwater was contaminated."¹¹⁴

Why the deception? In December 1988, the O'Brien and Gere Contaminated Ground Water Study for Camp Lejeune was released. The report identified two pools of free floating gasoline in the groundwater at Hadnot Point. The engineers were unable to clearly define the exact boundaries and extent of the plumes. Clearly, the fuel contamination was much worse than the 23,150 to 33,150 gallons cited in base inventory records.¹¹⁵

Sometime between 1985 and 1990, the Navy moved handling of the HPFF fuel loss problem to LantDiv's Underground Storage Tank Program. We have been unable to ascertain the exact date and how this was accomplished. The Navy stated in their 2009 written responses to Senator Burr and Hagan that:

"After 1986, the sites were evaluated to determine whether they were under the CERCLA, in which the EPA or RCRA, in which the state has primacy. In 1988 it was determined that corrective action at the HPFF fell under RCRA and therefore the State of North Carolina had primacy."¹¹⁶

Apparently, the Navy and Marine Corps forgot to inform the EPA of their evaluation. There was another problem with their arbitrary determination. The CERCLA vs. RCRA delineations did not apply if mixed contaminants were present. If mixed contaminants were present at a Superfund site, CERCLA is primary. The issue came to a head at a TRC meeting in July of 1990. During the meeting, Camp Lejeune officials informed the EPA representative that HPFF was not part of the Federal Facilities Agreement and thus out of the purview of the EPA. Base officials advised the EPA that a fuel recovery system for the HPFF was finalized and ready for bidding. Once bidding was completed, the Navy and Marine Corps were ready to begin remediation of the shallow aquifer around the HPFF. The EPA representative, Victor Weeks, disagreed and advised the attendees of the meeting there was a mixing of solvent plumes and fuel plumes and as such, the groundwater cleanup in the HPIA is all interconnected.

"Just because it's an underground storage tank at this point doesn't matter to us because we have a combined plume." Mr. Weeks went on to conclude: **"If this was an isolated area separated from Hadnot Point, we could agree with that (Handling under the state's UST program) we feel like it's part of the CERCLA program as well".** He also warned that the Navy was doing work at their own risk.¹¹⁷

By April of 1992, Mr. Weeks was no longer the EPA representative working on Camp Lejeune. The EPA replacement received a letter from Paul Rakowski at LantDiv requesting that the HPFF be exempt from CERCLA under the petroleum exclusion because Jet Fuel was the only source of contamination at the HPFF.¹¹⁸ Shortly afterwards the HPFF was officially moved to the RCRA program and under the purview of the State of North Carolina. The result of this move was the HPFF was dropped from CERCLA and corresponding reports pertaining to CERCLA sites on the base. For example, the 1994 Final Remedial Investigation Report for Operable Unit 1 (Sites 21, 24 and 78 in the Hadnot Point Industrial Area) mentions the existence of the HPFF within the Operable Unit, but then the report added that:

¹¹³ Cercla 496, Pdf page 74, August 1988.

¹¹⁴ Cercla 496, Pdf page 54, August 1988.

¹¹⁵ Cercla 417, Pdf page 8 & 24, December 1988.

¹¹⁶ USMC Response to Senator Burr and Hagan Queries on Camp Lejeune, Pdf page 12, July 2009.

¹¹⁷ Cerlca 493, Pdf pp 4-11, July 1990.

¹¹⁸ Cercla 724, April 1992.

“Since the fuel farm area is a UST problem, it is not included as part of the CERCLA RI/FS process, but is being handled as a separate study under the UST Program.”¹¹⁹

Another result of the move from RCRA to CERCLA was that documents pertaining to the UST Program were not required to be filed for public view in the CERCLA Administrative Record. This is evident when one compares the CERCLA administrative records file to what was filed with the State of North Carolina. The end result was that control of information concerning the Hadnot Point Fuel Farm lay at the discretion of the Navy and what reports they chose to submit to the State of North Carolina. The EPA was effectively out of the HPFF picture.

A July 1994 court recorded public hearing was held at Camp Lejeune concerning the proposed clean up for the Hadnot Point Industrial area, except the HPFF. A base representative was asked why there was no public hearing for the HPFF. Neal Paul, The base Installation Restoration Program Manager for Camp Lejeune responded:

“There are some public relations requirements and this predates me.”

Mr. Paul failed to answer the question and advised the attendees of the meeting:

“to date there’s like 25,000 gallons of gasoline from the inventory records that were shown to be missing. And to date we have recovered about 20,000 gallons of gasoline.”

“but the plume treatment is pretty close to being remediated.”

“If you get 75% of the free product that you think you spilled into the groundwater, then you’re doing a great job, and 20 out of 25 is almost 80 percent. So, we done probably as good as we can do.”

“And that is really one of our big success stories.”

“From the people I’ve talk to in the state agree it is a success.”¹²⁰

Two years later a partnering meeting hosted by Mr. Paul was held at Camp Lejeune. The attendees included base officials, the Navy’s contractor for the remediation work on the base, representatives from the State of North Carolina, EPA and personnel from LantDiv. The meeting was not open to the public. A contractor for the Navy advised the attendees that based on data from an engineering contractor working on the HPFF, an estimated 800,000 gallons of fuel had been lost at the HPFF and benzene was appearing in the deep aquifer.¹²¹ Notably absent from the meeting were representatives from the ATSDR. The ATSDR 1997 PHA for Camp Lejeune was still in draft form at the time of the meeting. The brief reference to the 800,000 gallon fuel loss was the only place we have found in the entire CERCLA library which quantified the size and scope of the fuel plumes at Hadnot Point and is more than the disclosed 23,150 to 33,150 gallons lost in Marine Corps inventory records.

The former base Fleet Service and Refueling area was located within 300 feet and up-gradient from well HP-602. Buildings 1100, 1111, 1115 and seven underground storage tanks comprised the facility. The USTs were intra-connected to the fuel farm by underground piping.¹²² The facility served as a service station from 1957–1965, and administrative office from 1965–1972, a data processing center 1972–1976 and a printing plant from 1976–1986.¹²³ The tanks were removed from the ground in 1993 and the contents of the tanks were described as diesel fuel and gasoline.¹²⁴ Building 1115 turned out to be a separate and distinct source of fuel loss at the Hadnot Point Industrial Area. Last week the Navy released many of the documents on the web portal discovered by ATSDR last year to the public. We are currently reviewing this previously undisclosed document library and we are finding indications organic solvents were mixed in the fuel plume at this site. As far as we know, no specific risk assessment or remedial investigation was ever performed for building 1115. Instead, the Navy sent a letter to the State of North Carolina advising the State that building 1115 was being incorporated into the Hadnot Point Fuel Farm and the two were handled as one site.¹²⁵ Who gave the Navy the authority to make this decision and why was it not challenged by the EPA? Building 1115 was only mentioned in the CLW and CERCLA libraries. The extent of the contami-

¹¹⁹ Cercla 1161, Pdf page 78, June 1994.

¹²⁰ Cercla 366, Pdf pp 91–94, July 1994.

¹²¹ Cercla, 1866, Pdf page 4, November 1996.

¹²² Cercla 2358, Pdf page 289, January 1989.

¹²³ Cercla 651, October 1986.

¹²⁴ CLW 1917, March 1993.

¹²⁵ North Carolina UST Document Library, April 1994.

nation found in the groundwater underneath the former Fleet Service and Refueling Area was not previously disclosed to ATSDR. Details of the contaminants found at building 1115 are currently surfacing as we review the documents. The concealment of building 1115 did not stop with ATSDR. In 1991 the EPA queried the Navy whether USTs existed at building 1100/1115.¹²⁶ Paul Rakowski from LantDiv responded that a leaking 55 gallon drum of PCE was found at the site but failed to answer the EPA's question on the USTs.¹²⁷ If one agency of our government chooses to misrepresent and conceal material facts to Federal regulators in another agency and nothing happens when the truth is revealed, where is the accountability?

It is now thirteen years since the release of the 1997 Public Health Assessment for Camp Lejeune and the community still has no clear answer to what happened to us while we or our loved ones served our country. Our country has seen a renewed appreciation for our volunteer military and the sacrifices made by our fighting men, women and their families. It is hard to drive down the road without seeing a "support the troops" ribbon on someone's car. How can we profess respect for our military personnel and families when in their time of need, this country not only abandoned them but abandoned their families as well. We trusted the Marine Corps would do the right thing for their Marines and their families. We trusted that the EPA and the State of North Carolina would ensure the Marine Corps fully disclosed the extent of the contamination at Camp Lejeune. The subtitle of this hearing is "Looking back, Moving Forward." We looked back and found the Marine Corps' statements do not match the historical documents. We can not move forward with understanding the Camp Lejeune drinking water contamination unless there is a full disclosure from the Navy and Marine Corps. We can not rely on the agencies of the Executive branch to provide our answers. The Department of Defense was the polluter. The Department of Justice represents the government for all claims brought against the Navy and Marine Corps and overruled the EPA special agent investigating government wrong doing at Camp Lejeune. Congress is where this issue must be resolved. What other measures has the DoJ taken to bolster their defense for the government? Our exposures are known and well documented. The negligence of the Marine Corps is clear. There are thousands of Marines, Sailors, their family members and base employees who were sickened by the fouled water at Camp Lejeune. When will this country fulfill our commitment to support the troops?

BIOGRAPHY FOR MICHAEL PARTAIN

Michael Partain is the dependent son of Captain Warren Partain and was born at Camp Lejeune in 1968 during the drinking water contamination. His parents lived aboard the base at Tarawa Terrace. The Partain family settled in Florida in 1972 after leaving the Marine Corps. Three years ago Michael was diagnosed with male breast cancer at the age of 39. Since then he has located 63 other men from Camp Lejeune with the disease. Michael became involved with the Camp Lejeune after viewing a television report about Camp Lejeune while he was treating his breast cancer. Since then he has become a community advocate and a community representative of the ATSDR Community Assistance Panel (CAP) for Camp Lejeune.

Chairman MILLER. Thank you, Mr. Partain.

We probably are going to be interrupted by votes, so we do need to try to keep some kind of schedule, and I appreciate your testimony. It is an important contribution to today's hearing.

Mr. Watters, you are recognized for five minutes.

STATEMENT OF JAMES WATTERS, DIRECTOR, GRADUATE MEDICAL EDUCATION, TEXAS TECH UNIVERSITY HEALTH SCIENCES CENTER, FORMER NAVY LIEUTENANT, RETIRED COMMANDER, NAVY RESERVE, MEDICAL SERVICE CORPS AND CAMP LEJEUNE VETERAN DIAGNOSED WITH KIDNEY CANCER

Mr. WATTERS. Mr. Chairman, Ranking Member Broun, members of the Committee, thank you for taking the time to address this important issue and permitting me the honor of appearing before you

¹²⁶ Cercla 71, Pdf page 5, October 1991.

¹²⁷ Cercla 27, December 1991.

to tell my story. I believe it is similar to the stories of thousands of others who were at Camp Lejeune.

I am a retired Navy Medical Service Corps Commander who served at Naval Regional Medical Center, Marine Corps Base Camp Lejeune from June 1977 until November 1979. Prior to my naval service, I served in the U.S. Army Infantry in Vietnam from November 1969 until I was wounded in combat while walking point for my infantry company on September 6, 1970. When I was wounded, my commanding officer, Captain Allen G. Vitters, ran and crawled through enemy fire to drag me to safety. This is what a leader does.

In November 2007, I was diagnosed with advanced renal cell carcinoma, stage 3, almost stage 4. I had a kidney removed in December 2007, and in January 2008 was told by my oncologist I had about a year to live. In approximately July 2008, I received an envelope from the IRS which contained a letter from General Payne advising me I had been exposed to trichlorethylene and other hazardous chemicals while serving at Camp Lejeune. It is important to note this letter came 21 years after the Marine Corps and the Department of the Navy knew in 1987 that I and many others had been exposed to volatile organic compounds.

I researched the possible link between TCE and RCC, renal cell carcinoma, and found a probability of the link between TCE and RCC. I then filed a claim with the Department of Veterans Affairs in order to obtain benefits for my family for after my death. The VA, of course, denied the claim. I resubmitted my VA claim including additional information about the link between TCE and renal cell carcinoma. The claim was again denied in March of 2009. I then consulted three science faculty, two of whom are toxicologists who work at the medical school where I work as an Assistant Dean for Graduate Medical Education. They wrote strong letters of support for my claim, and I requested a hearing with a decision review officer at the VA regional office in Waco, Texas. I was granted the opportunity to appear before the decision review officer in July—I am sorry—in June of 2009 to present my case. The evidence I presented met the VA criteria “as likely as not” so the claim was decided in my favor and I was granted 100 percent service-connected disability for the renal cell carcinoma as a result of my exposure to TCE at Camp Lejeune. Receiving this disability rating made my wife and my adult disabled son eligible for CHAMP VA insurance coverage for the rest of their lives, and CHAMP VA is similar to TRICARE.

I would have appreciated being notified by the Marine Corps even 18 months before the July 2008 notice. It would have made a difference in when my kidney cancer was diagnosed and my prognosis.

As I researched the Camp Lejeune situation, I was horrified to find out how many people the Marine Corps had poisoned and the obstructionist tactics the U.S. Marine Corps and Department of the Navy has used to avoid responsibility and avoid providing any type of assistance with health care or any financial assistance to those they have sickened and to the families of those whose deaths they have caused. Examples of obstructionist tactics include the Marine Corps’s failure to cooperate with the State of North Carolina’s ef-

forts to analyze and address this problem in the 1980s, The 21 years it took for the Marine Corps to notify those they poisoned, the intense pressure it took to have the Marine Corps fund the ATSDR study, the failure of the Marine Corps to turn over critical documents until forced to do so, and numerous other examples of the Marine Corps and Department of the Navy strategy to deny and delay as long as possible.

I firmly believe this strategy is based upon financial considerations and I do not know what role the Department of Defense has in this strategy. It is possible that the Marine Corps and Department of the Navy senior leaders are "just following orders."

It is my firm belief that the United States Marine Corps and Department of the Navy leadership have abandoned and betrayed their wounded from Camp Lejeune including women and children and left them to suffer and die. I am very sensitive to caring for the wounded because in the Army we were trained to never leave our wounded behind. I saw men wounded and killed in Vietnam trying to recover our wounded. The U.S. Soldier's Creed specifically states, "I will never leave a fallen comrade." If the Marines have a similar creed, their senior leaders seem to think it does not apply in this case.

Suggestions for immediate action: Because it is crystal clear there is a leadership vacuum at the United States Marine Corps and Department of the Navy on this issue, I suggest Congress step in immediately to pass legislation to provide health care to those who have been sickened by the Camp Lejeune poisonings. Everyone in this room knows this is morally and ethically the right thing to do. The United States Marine Corps and Navy have proven they will not and cannot be trusted to do the right thing. Time is of the essence, so political party differences should not be permitted to delay taking effective action.

Number two: The Department of Veterans Affairs should immediately consider how they can streamline the disability claims process for those who have been sickened by the Camp Lejeune poisons. The only reason I was able to win my claim was because of the resources at my disposal in the school of medicine where I work. Very few veterans have such resources available to them. Eventually the VA will develop a list of presumptive illnesses for those exposed at Camp Lejeune. It should not take 10 or 15 years as it did for Agent Orange. People are sick and they and their families need help now. Also, the VA should publicize this matter in their outpatient clinics and hospitals to alert those who were poisoned. I have tried for over one year to have my local VA hospital in Amarillo, Texas post notices of the Camp Lejeune situation to alert veterans who may have been exposed. When I told them that I was coming to this hearing, they decided to finally post the notices.

Lastly, as you hear from the United States Marine Corps and the Department of the Navy about all they have done to address this matter, I would urge you to consider the evidence of the steps the U.S. Marine Corps and the Department of the Navy have taken to obstruct resolution of this very serious environmental disaster. This is basically a "friendly fire" incident in slow motion and every possible measure has been taken by the Marine Corps and the Department of the Navy to deny and delay providing any assistance

whatsoever to their victims. The Marines claim to have spent \$22 million to address this but I would point out that this amount over 20 to 25 years is a pittance and I would ask you to consider what amount of this total was the Marine Corps compelled to spend and how much was spent on obstructing any efforts to provide any assistance whatsoever to Marine Corps victims.

Finally, the U.S. government has a very poor track record of assisting in a timely manner those who have been harmed by the Department of Defense. Examples include the atomic vets, the Agent Orange vets, the Gulf War syndrome vets, and now this. Congress has the opportunity to deal with this in a timely and effective manner and to do the right thing. I urge Members of Congress to do what you know should be done. Thank you.

[The prepared statement of Mr. Watters follows:]

PREPARED STATEMENT OF JAMES L. WATTERS

I start today by thanking the Members of this Congressional Committee for taking the time to address this important issue and permitting me the honor of appearing before you to tell my story.

My name is James Watters and I am a retired U.S. Navy Medical Service Corps Commander who served at the Naval Regional Medical Center, Marine Corps Base Camp Lejeune from June, 1977 until November, 1979. Prior to my Naval service I served in the U.S. Army infantry in Vietnam from November, 1969 until I was wounded in combat while walking point for my infantry company on September 6, 1970. When I was wounded, my commanding officer, Captain Allen G. Vitters ran and crawled through enemy fire to drag me to safety. That is what a leader does.

In November, 2007 I was diagnosed with advanced (stage 3, almost stage 4) renal cell carcinoma (RCC). I had a kidney removed in December, 2007 and in January, 2008 was told by my oncologist I had about a year to live.

My initial thought about the cause of the cancer was my exposure to agent orange because there is no history of renal cell carcinoma in my family. My research showed no link between agent orange and RCC.

In approximately July, 2008 I received an envelope from the IRS which contained a letter from a Marine Corps General advising me I had been exposed to trichloroethylene (TCE) and other hazardous chemicals while serving at Camp Lejeune. It is important to note that this letter came 21 years after the USMC and the Department of the Navy knew, in 1987, that I and many others had been exposed to volatile organic compounds. (VOCs) I researched the possible link between TCE and RCC and found a probability of the link between TCE and RCC. I then filed a claim with the Department of Veterans Affairs (VA) in order to obtain benefits for my family for after my death.

The VA of course denied my claim. I resubmitted my VA claim including additional information about the link between TCE and RCC. The claim was again denied in March of 2009. I then consulted three science faculty, two of whom are toxicologists who work at the medical school where I work as an Assistant Dean for Graduate Medical Education. They wrote strong letters of support for my VA claim and I requested a hearing with a Decision Review Officer (DRO) at the VA Regional Office in Waco, Texas.

I was granted the opportunity to appear before the DRO in June, 2009 to present my case. The evidence I presented met the VA criterion "as likely as not" so the claim was decided in my favor and I was granted 100% service connected disability for the RCC as a result of my exposure to TCE at Camp Lejeune. Receiving this disability rating made my wife and my adult disabled son eligible for CHAMPVA insurance coverage for the rest of their lives. (CHAMPVA is very similar to TRICARE.)

I would have appreciated being notified by the USMC even 18 months before the July, 2008 notice. It would have made a difference in when my RCC was diagnosed and my prognosis.

As I researched the Camp Lejeune situation I was horrified to find out how many people the USMC had poisoned and the obstructionist tactics the USMC and the Department of the Navy have used to avoid responsibility and avoid providing any type of assistance with health care or any financial assistance to those they have sickened, and to the families of those whose deaths they have caused. Examples of obstructionist tactics include the USMC's failure to cooperate with the State of

at all times. Those were the priorities for the operators. The chemical nature of the water was not a concern.

Mrs. DAHLKEMPER. So the woman that you had met with——

Mr. HARGETT. Ms. Betsy Betz.

Mrs. DAHLKEMPER. You don't believe that she understood?

Mr. HARGETT. She sought to understand. She asked many questions, and I gave her references, and indeed, she did her own research to determine what the impact of this contaminant was in the water, and I think she was genuinely concerned over the dependants and Marines that were consuming it.

Mrs. DAHLKEMPER. And then in the short meeting that you had that lasted less than five minutes, as you said, I think it was with——was it with a——

Mr. HARGETT. A Lieutenant Colonel.

Mrs. DAHLKEMPER. Were you able at all to talk about the effects of these chemicals?

Mr. HARGETT. No. Ms. Betz presented him a rather large stack of our reports and her own memos concerning the water and he simply put those to the side and then we were dismissed, but I did not have any opportunity to discuss the significance, and I had made some preparation to do so, but no, we did not have an opportunity to have a discussion about that water.

Mrs. DAHLKEMPER. Well, my time has expired, and I will yield back.

Chairman MILLER. Thank you.

We have been called to votes but we have some time to get there, so perhaps we can get a shortened second round of questions in, excuse this panel, then we need to go to votes, and then have the second panel when we return for votes.

Mr. Watters and Mr. Devereux, both of you have now had your claims honored but Mr. Partain is not a veteran. He is a dependant. Do you think it is fair that you are being compensated and Mr. Partain is not?

Mr. DEVEREUX. No, I absolutely do not. I think even in my statement, if I didn't publish, I apologize, but one of the things that I did agree on, not only was it just the Marines, the dependants, the civilians, I mean, he was really still part of the Marine Corps really. At Camp Lejeune, I mean, there were civilians also that I think should be under this, absolutely, no question about it.

Chairman MILLER. Mr. Watters?

Mr. WATTERS. I am very concerned about the dependants, about the folks who cannot file a claim with the VA. I am also very concerned about the civil service personnel. The base had a huge civil service population and those people, many of those people worked there for 20 or 30 years and they drank this water. You know, I don't even know what their status is but I think it would be unfair to not address their concerns and do something about their health issues.

Chairman MILLER. Mr. Hargett, one of the peculiar arguments is that the Marines did not act more quickly because they knew that the water was contaminated with PCE and TCE but didn't know the source of it and therefore they did not act because they didn't know the source. When I have seen a fire truck careening down the street with sirens going, I would assume that they were in a hurry

to get to a fire to put it out, not to get to a fire to investigate the source of the fire. Does it make sense to you that they would not close the well when they knew that it was contaminated, even if they did not know the source?

Mr. HARGETT. Mr. Chairman, it was—this one particular well, the 602 well, was one of six or eight wells in the field. Now, this was a field of wells drawing water from a rather shallow aquifer. That contaminated area would have been influenced by a local source. It would have been very easy to simply shut that well down, and that was the recommendation that I gave Ms. Betz and the operator, to not use that well.

Chairman MILLER. Dr. Clapp, quickly on the same point.

Dr. CLAPP. I am sorry. The—

Chairman MILLER. Does it make sense not to close the well if you don't know the source of the contamination but you know that it is in fact contaminated at the levels that we now know what we knew then?

Dr. CLAPP. I think it makes no sense not to close such a well.

Chairman MILLER. Okay. Without knowing the source?

Dr. CLAPP. Correct.

Chairman MILLER. Okay. I will now recognize Dr. Broun for a shortened period of time.

Mr. BROUN. Thank you, Mr. Chairman.

Mr. Hargett, did you test water samples from other sites listed on the national priority list, and if so, how did the Department of Defense's response to the results you communicated differ from the response from other government entities facing similar situations at the time?

Mr. HARGETT. Most of our services for Safe Drinking Water Act compliance were for municipalities. Those municipalities were very concerned of any contamination of any kind that would show up in their water supply. If, for example, the city of Jacksonville adjacent to the base would find a well with anything, any contaminant, either chemical or biological, they would isolate that well and take it out of service until they knew what was going on in that well. We did not do additional priority pollutant analyses or additional screening. Our focus from the start was identifying the interference to our trihalomethane analysis. We wanted to know why we had trouble in getting an accurate quantification. So we focused on that area, the chlorinated solvents, because it interfered with our tests. We did not do additional survey work. It was discussed with Ms. Betz that additional evaluation was needed but we had no further activity in that area.

Mr. BROUN. Did you test any other wells besides those on Camp Lejeune, any in the general area?

Mr. HARGETT. We did the neighboring wells for the city of Jacksonville. We did analyses throughout eastern North Carolina for compliance. This was a regulatory requirement from the State of North Carolina that they define the level of trihalomethanes and report to the state those results.

By the way, there was some absence of reporting protocol from the base, and that was part of the reason that the water supply section was concerned. If we were doing the analyses, where were their quarterly reports?

licly released. Based on your review of those documents please indicate the DON and/or the USMC's knowledge concerning the dangers of organic solvents in the drinking water supplies at Camp Lejeune prior to these wells being shut down in 1984. Are there any indications based upon the available records that the Camp Lejeune base command staff influenced or concealed the public health warnings issued by both the Army and Grainger Laboratories in the early 1980s regarding the chemical contaminants in the drinking water supply at Camp Lejeune.

A1. Yes there are several indications that both representatives from the Navy's Atlantic Division (LantDiv) and the base command staff attempted to minimize the early contamination warnings issued by the Army and Grainger laboratories from 1980-1984.

According to the historical documents found in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and Camp Lejeune Water (CLW) Libraries for Camp Lejeune there are clear indications that the leadership of the Navy and United States Marine Corps knew or at least should have known about the danger of groundwater used for potable water by pollutants used in and around Camp Lejeune. The Navy issued a substantial revision of their potable water regulations in 1963. These regulations known as BUMED 6240.3B applied to all Naval vessels and installations including Camp Lejeune. While the regulation did not specifically regulate PCE, TCE, Vinyl Chloride and Benzene individually as contaminants, the regulation did set forth strict guidelines and preventive measures to prevent contamination of a water supply from extraneous sources. A second order, Base Order 5100.13B, from the base's Commanding General in 1974 revealed that Marine Corps leadership knew that organic solvents were hazardous and that there was a danger of drinking water contamination from improper disposal practices of these chemicals. A 1979 base environmental survey (CLW 245) lists Dry cleaning solvents, trichloroethylene, toluene, xylene and mogas as hazardous materials. Then in 1982 the Base Supervisory Chemist, Elizabeth Betz, noted several adverse health effects linked to tetrachloroethylene and trichloroethylene exposures in her memorandum for the record concerning the 10 August 1982 Grainger Laboratory letter to Camp Lejeune (CLW 606). These documents clearly show that at least by 1963 the Navy understood the dangers between industrial pollution and groundwater contamination.

It is not known at what exact date this relationship was established because the preceding versions for Base Order 5100.13B are missing from the historical record. Furthermore, the order lacked any higher headquarter references which would explain and justify why the Commanding General of Camp Lejeune issued the order in the first place. Without these references we cannot ascertain the exact date when the Navy knew organic solvents and other industrial pollutants including benzene was a hazard to ground water sources used for drinking water purposes. However, a 1986 court case, *Clark vs. USA*, did establish that by the 1950's it was generally known that TCE was unfit for human consumption.

The Navy's LantDiv was responsible for providing engineering support for Naval facilities, including Camp Lejeune. In 1979 two Naval facilities in Pennsylvania (Warminster and Willow Grove) detected PCE and TCE in their potable water systems. The contaminated wells were identified and closed immediately. Why did LantDiv fail to follow this same policy at Camp Lejeune? As cited in my testimony, representatives from LantDiv accompanied base officials in 1981 to test the Rifle Range system for organic contamination; this testing included the potable wells for that drinking water system. In July 1981 a letter from the Commander of Atlantic Division Naval Facilities Engineering Command to Camp Lejeune's Commanding General, Mr. Bailey of LantDiv advised Camp Lejeune not to use a Rifle Range potable water well found to be contaminated with organics. Concurrently with the testing of the Rifle Range, LantDiv received several warnings that the Hadnot Point water system was highly contaminated with chlorinated organics, including solvents. No action was taken by base officials or LantDiv personnel.

There are two specific examples which illustrate what we believe was a conscious decision by two separate Facility Assistant Chief of Staff Colonels to quash the significance of the Army and Grainger Laboratory's warnings to the base and LantDiv.

The first example took place on 25 August 1982 when Colonel J.T. Marshall responded to a letter from the Navy's Naval Energy and Environmental Support Activity (NEESA) concerning the draft copy of the base's Initial Assessment Study for Camp Lejeune (CLW 6332). The Colonel was tasked to review the draft copy of the report and provide comments by 25 August 1982. During the interim, the 10 August 1982 letter from Grainger Laboratory arrived on the Colonel's desk (CLW 592). Fifteen days later the Colonel responded to NEESA and advised that "Discussion of

Trihalomethane content of Rifle Range on page 2–18 and extensive data shown on pages 6–12 through 6–18 overly stresses relationship with hazardous material/waste disposal. It is important to note that accuracy of data provided by U.S. Army laboratory is questionable. It is recommended that TTHM information be de-emphasized throughout the report.” (CLW 6332).

Shortly after the August 1982 response to NEESA, a change order was issued for the IAS in December 1982 (CERCLA 2059). The Grainger findings contained in the 10 August 1982 letter were not included in the change order. The IAS report for Camp Lejeune was then released in April of 1983. The Army and Grainger Laboratory’s warnings concerning the Hadnot Point and Tarawa Terrace drinking water contamination were not included in the findings of the report.

The second incident occurred in June of 1983 after Mike Hargett of Grainger Laboratory informed the State of North Carolina about the problem with the base’s drinking water systems. On 1 June 1983, Colonel Marshall compiled a table for all of the trihalomethane testing done on the base. He did not include the actual analytical data sheets provided by Grainger Laboratory. The original Grainger data sheets contained written warnings about the TCE and PCE contamination present in the Hadnot Point and Tarawa Terrace potable water systems.

On 2 June 1983, Mr. Larry Elmore, Environmental Engineer from the State’s Water Supply Branch sent a letter to Colonel Marshall specifically requesting the analytical data sheets provided to the base by Grainger Laboratory (CLW 940). The base waited almost six months to provide a response. By then, Colonel Marshall was replaced by Colonel Lilley who finally responded to the Mr. Elmore’s letter. The Colonel wrote to Mr. Rundgren, head of the Water Supply Branch for the State of North Carolina and resubmitted the trihalomethane tables previously compiled by Colonel Marshall along with two additional tables explaining the results. Colonel Lilley also noted that per a 30 November 1983 telephone conversation with Dick Caspers at the Water Supply Branch, the original Grainger lab reports were not submitted as previously requested by Mr. Elmore in his 21 June 1983 letter. Colonel Lilley then requested that Hadnot Point be reduced from quarterly trihalomethane sampling to once a year. This same sampling was the source of the initial warning concerning the PCE and TCE contamination on the base (CLW 6348). It is important to note that benzene does not interfere with this type of testing and thus was not detected by either the Army or Grainger Laboratories.

Undoubtedly the interference from these two officers delayed the revelation of Camp Lejeune drinking water contamination for years. During that time tens of thousands of Marines, Sailors, their families and employees of the base were needlessly exposed to dangerous levels of PCE and TCE in the base’s drinking water system.